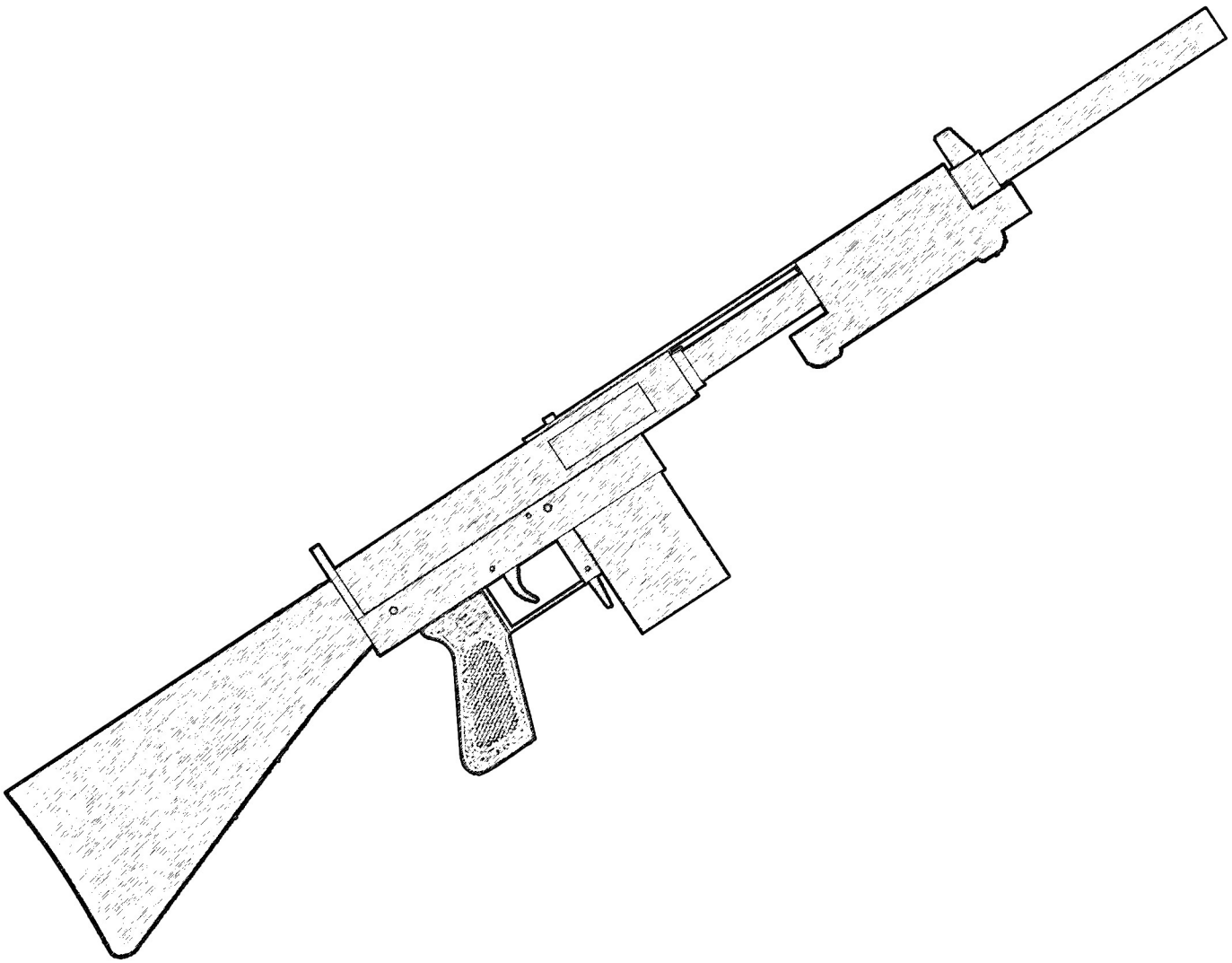
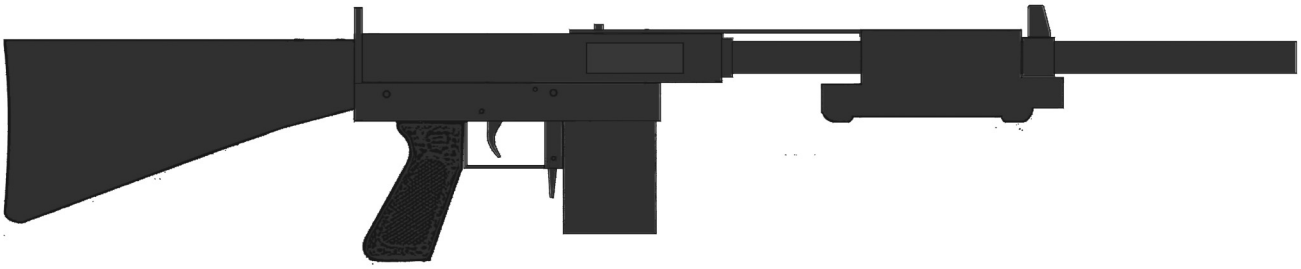
12 GAUGE PUMP-ACTION SHOTGUN

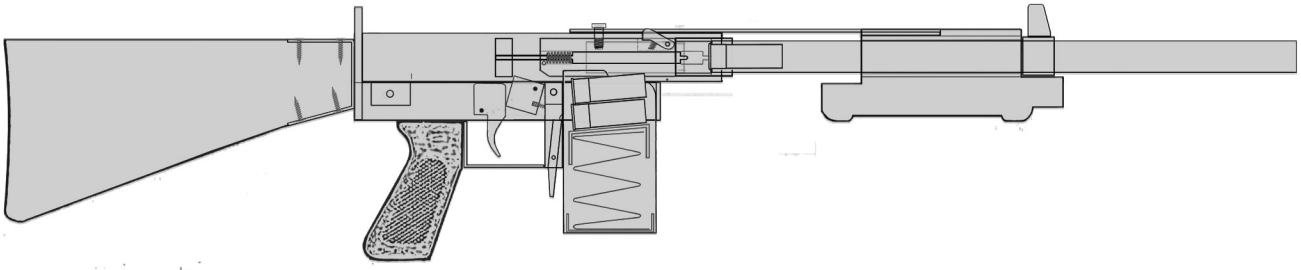
CONSTRUCTION PLANS



Professor Parabellum

LMT-12



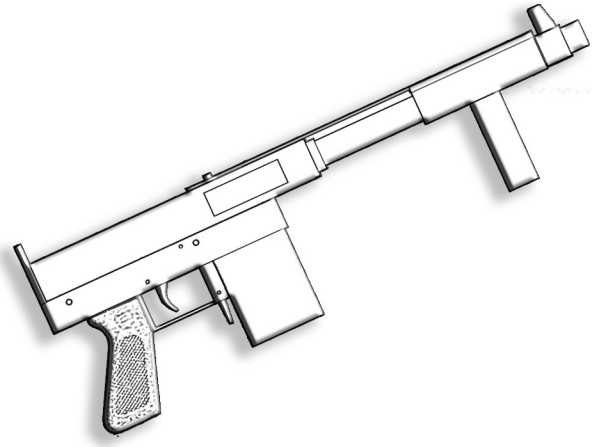


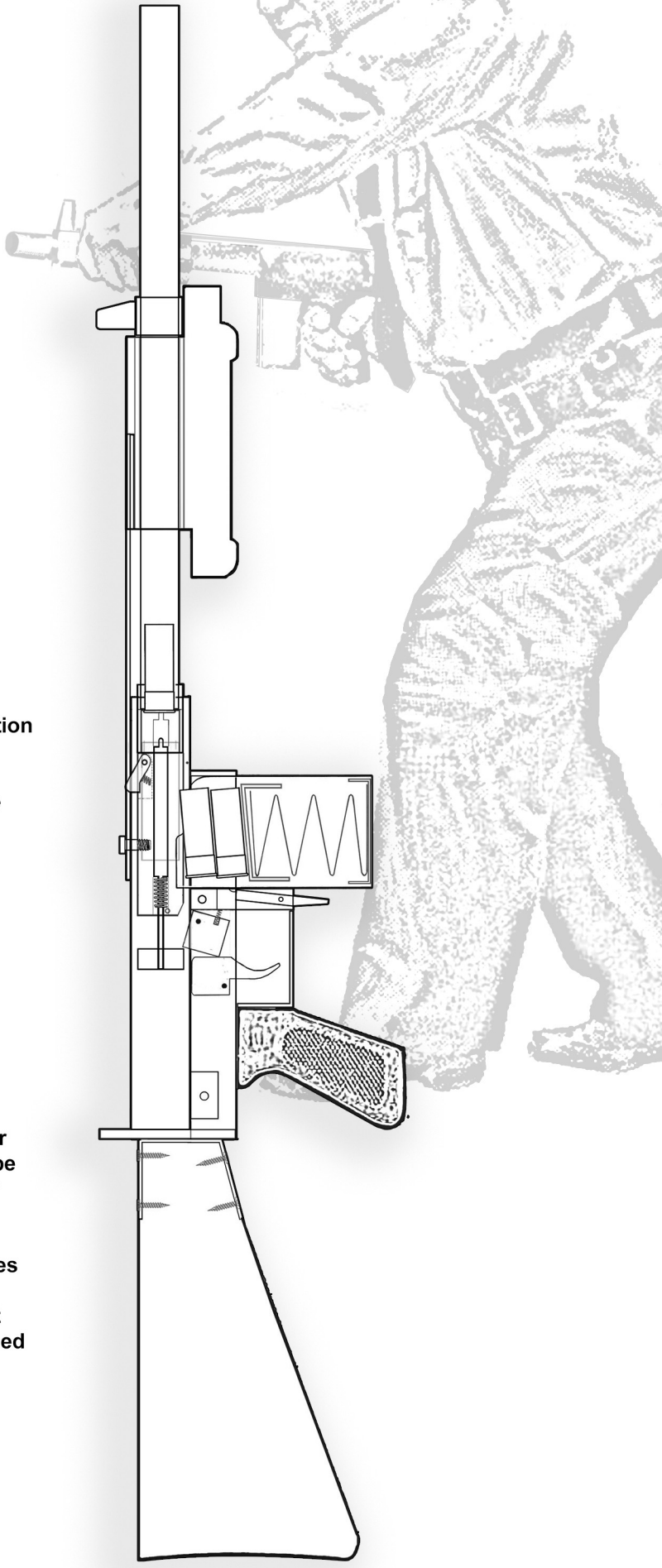
The following 12 gauge pump-action shotgun design can be manufactured in the home environment without the use of a lathe or milling machine.The majority of its components are constructed from standard sizes of steel box section and round tubing, including the barrel. 12 gauge being a cartridge which produces relatively low chamber pressures allows the the use of a simple bolt locking mechanism, in this instance a spring loaded lug which is keyed in or out of a hole in the thick-walled upper receiver via the rearward or forward motion of the action bar.

Magazines can be fabricated from rectangular tubing or the design adapted to accept commercially available shotgun magazines such as those offered for the Saiga-12. Additionally, cheap widely available surplus battle rifle magazines such as those made for the FAL, SLR, BAR or G3 can all be easily made to accept and feed 12 gauge shells by simply modifying the feed lips and front wall to allow the cartridges to sit higher and be stripped by the bolt.

Land Maintenance Tool

12 Gauge Detachable Magazine-Fed Repeater





Materials list:

- 38mm x 38mm (1 1/2” OD) x 3mm (.120) mild steel box section
- 30mm x 30mm x 2mm mild steel box section
- 30mm x 2mm (1” ID) mild steel round tube
- 25mm (1” OD) x 2.5mm (3/4” ID) seamless steel round tube
- 2mm thick, 20mm (3/4”) wide steel strap
- 25mm (1”) dia steel bar
- 30mm dia mild steel round or square bar
- 6mm (1/4”) dia steel bar
- 10mm thick steel plate
- 6mm (1/4”) thick steel plate
- 2” thick hardwood or plastic

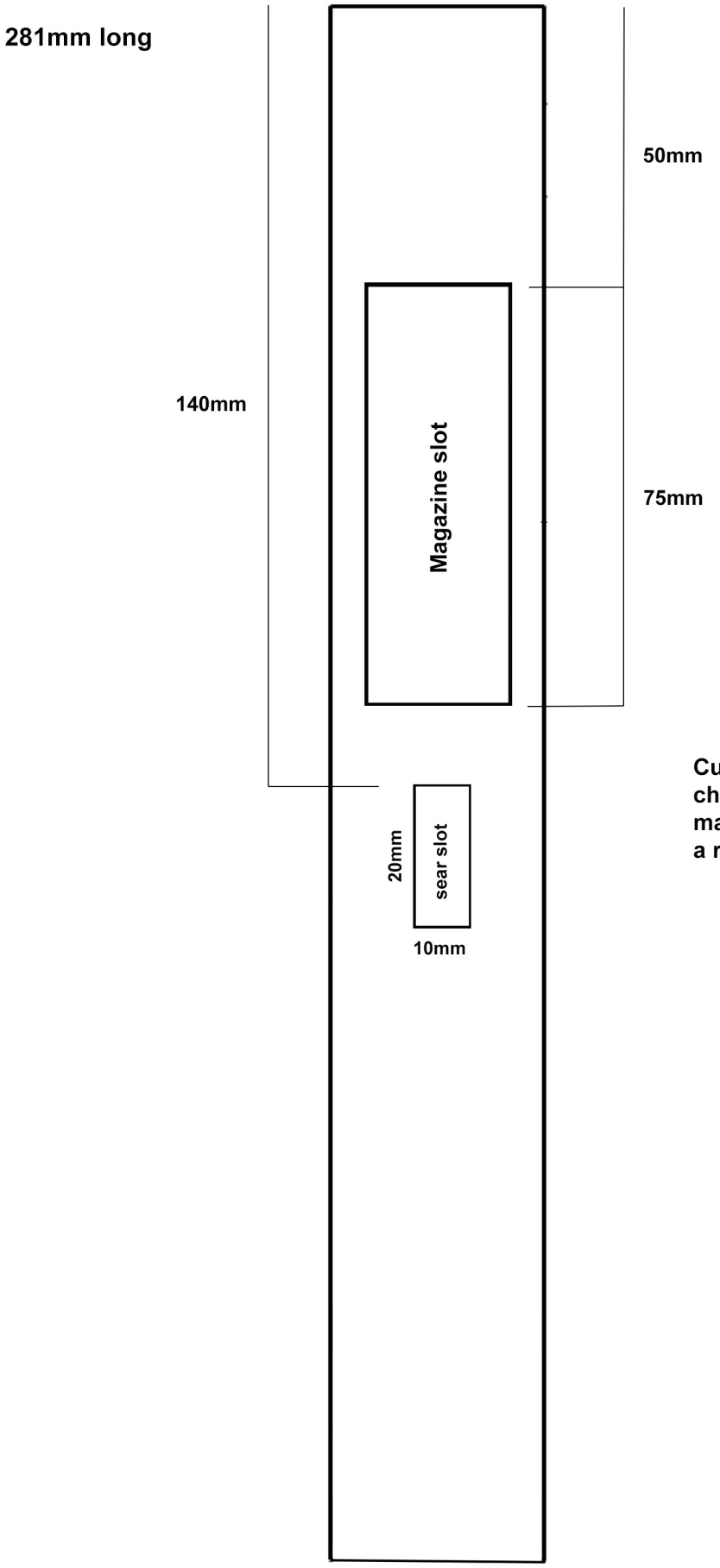
All pages included should be printed out on 8.5 x 11 US letter paper. Each component template is drawn to scale and can be cut out and glued to their respective thickness of material or used as reference for measurements.

Make sure the ruler at the bottom left of each sheet is 2 inches in length. Alternatively, take a screen-shot and enlarge the plans using a computer program until the ruler is the correct length, then trace the parts needed onto a sheet of paper taped over your computer’s screen.

For Academic Study Purposes only

Upper receiver

(Bottom)

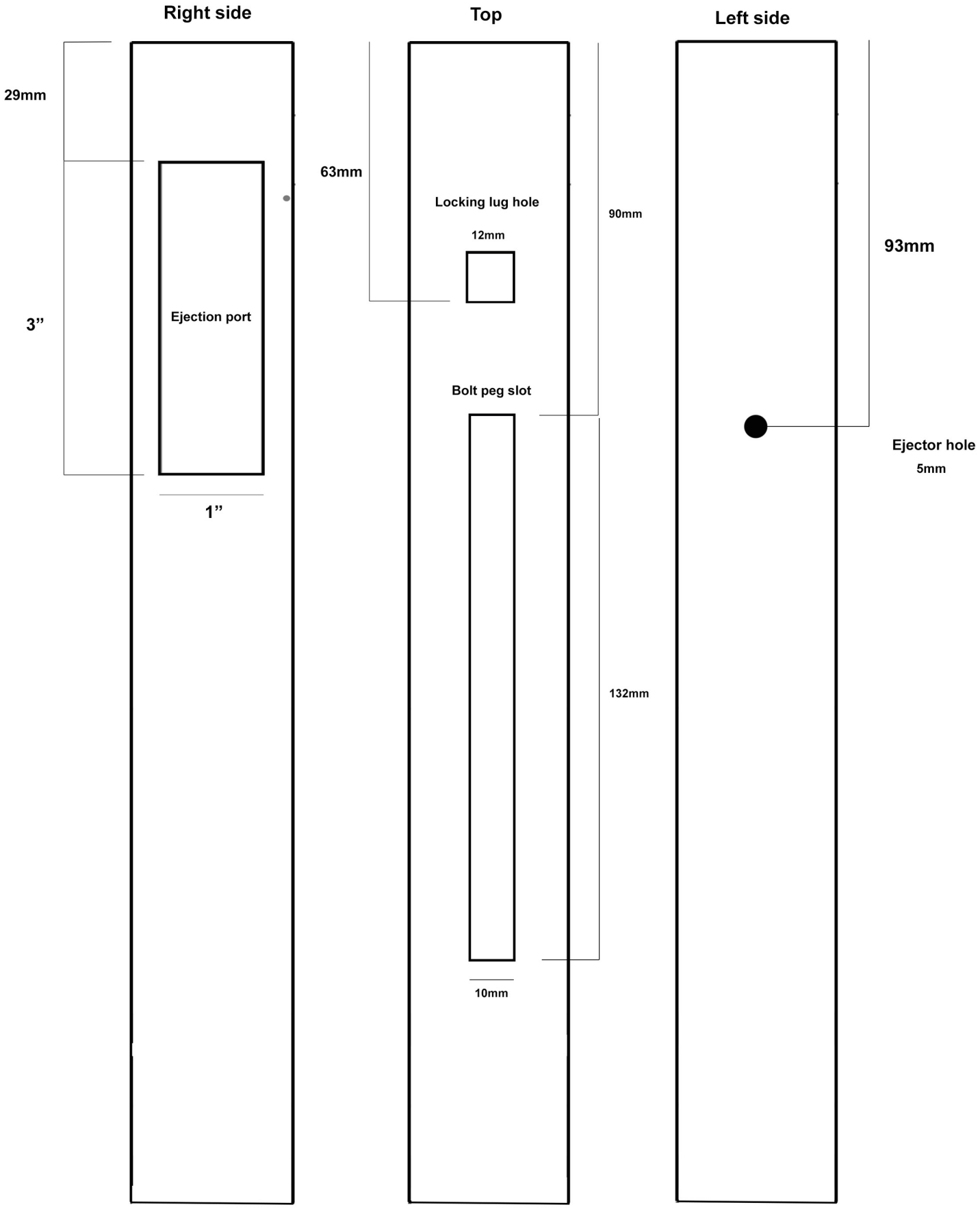


Cut out openings using a combination of chain-drilling holes around the inside of parts marked and slitting using a dremel fitting with a reenforced cut-off disc.

Mild steel square box section

38mm x 3mm wall
(1 1/2” x .120 wall)

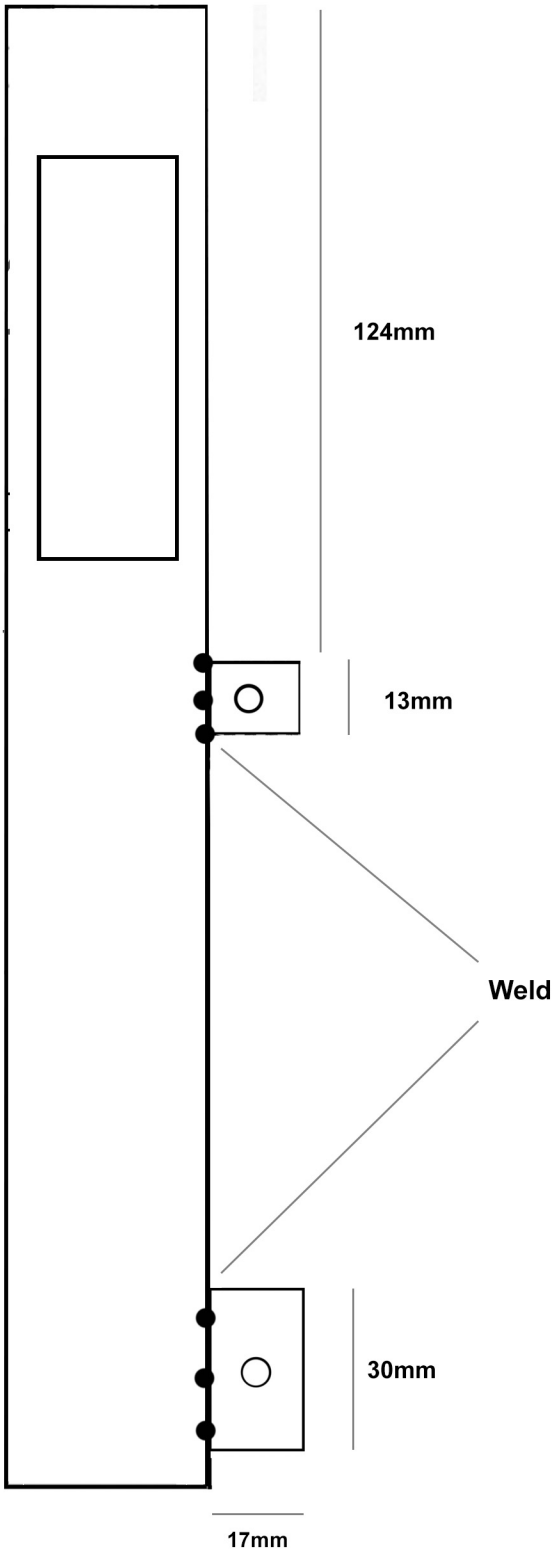
Upper receiver (Continued)



Mounting lugs

Can be made from solid blocks of 1” steel or folded from 3mm thick sheet to match inner dimensions of lower receiver

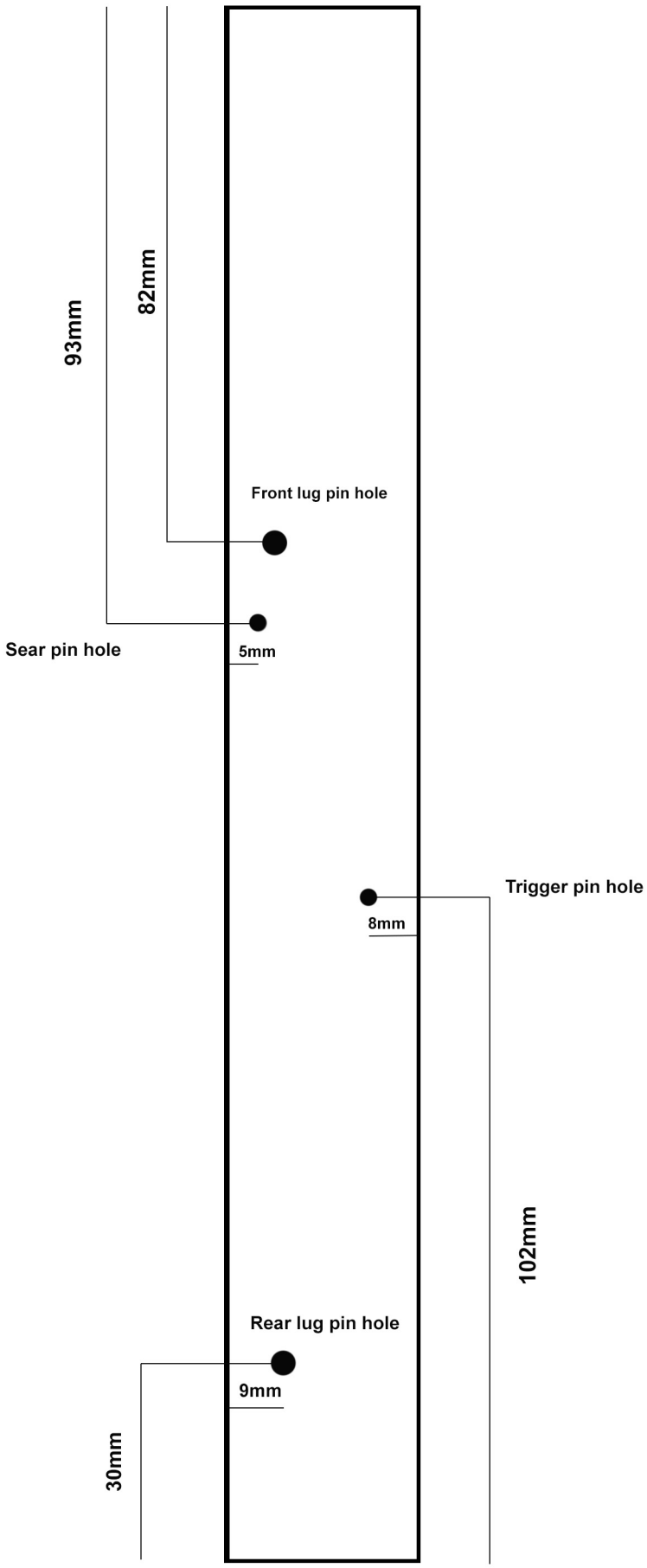
Drill holes while mounted in the correct position with lower receiver to ensure accurate alignment.
Take-down is achieved via two removable 30mm long 8mm diameter steel pins.



Lower receiver
(Right side)

30mm x 30mm x 2mm thick wall
mild steel square box section tubing

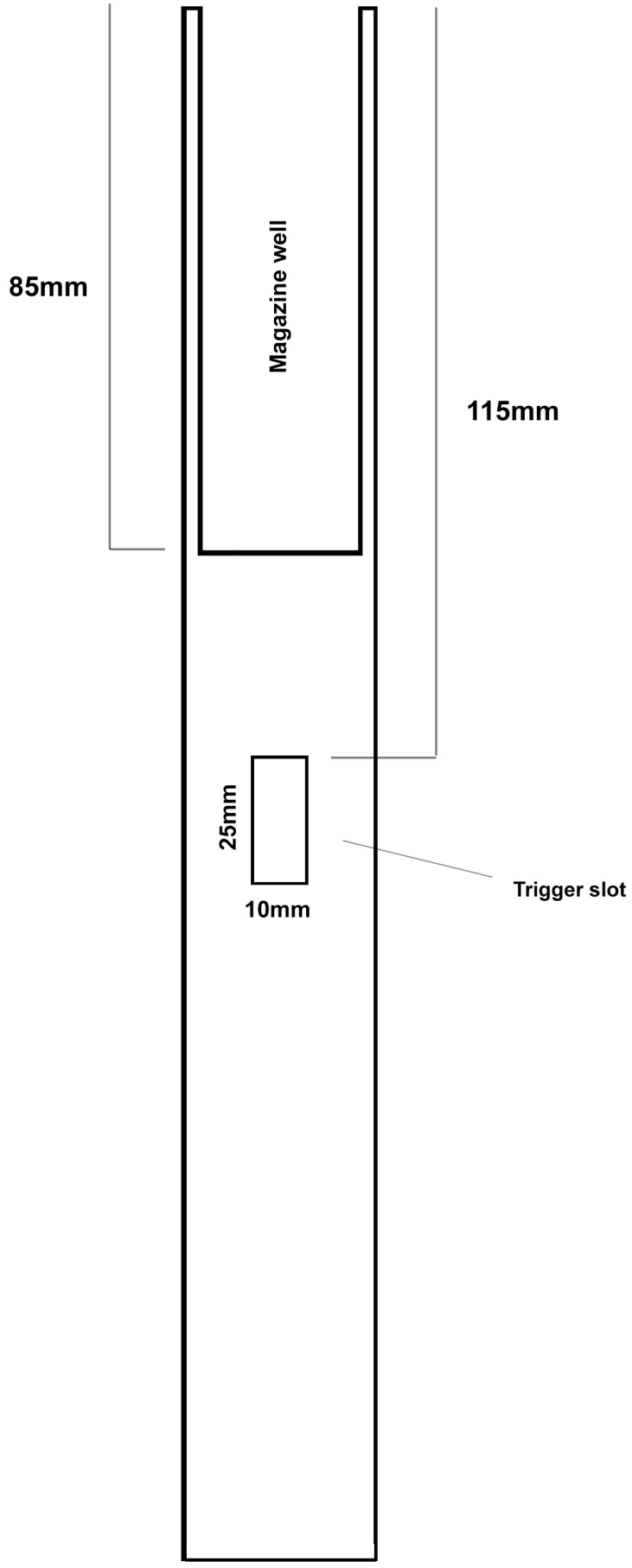
236mm long



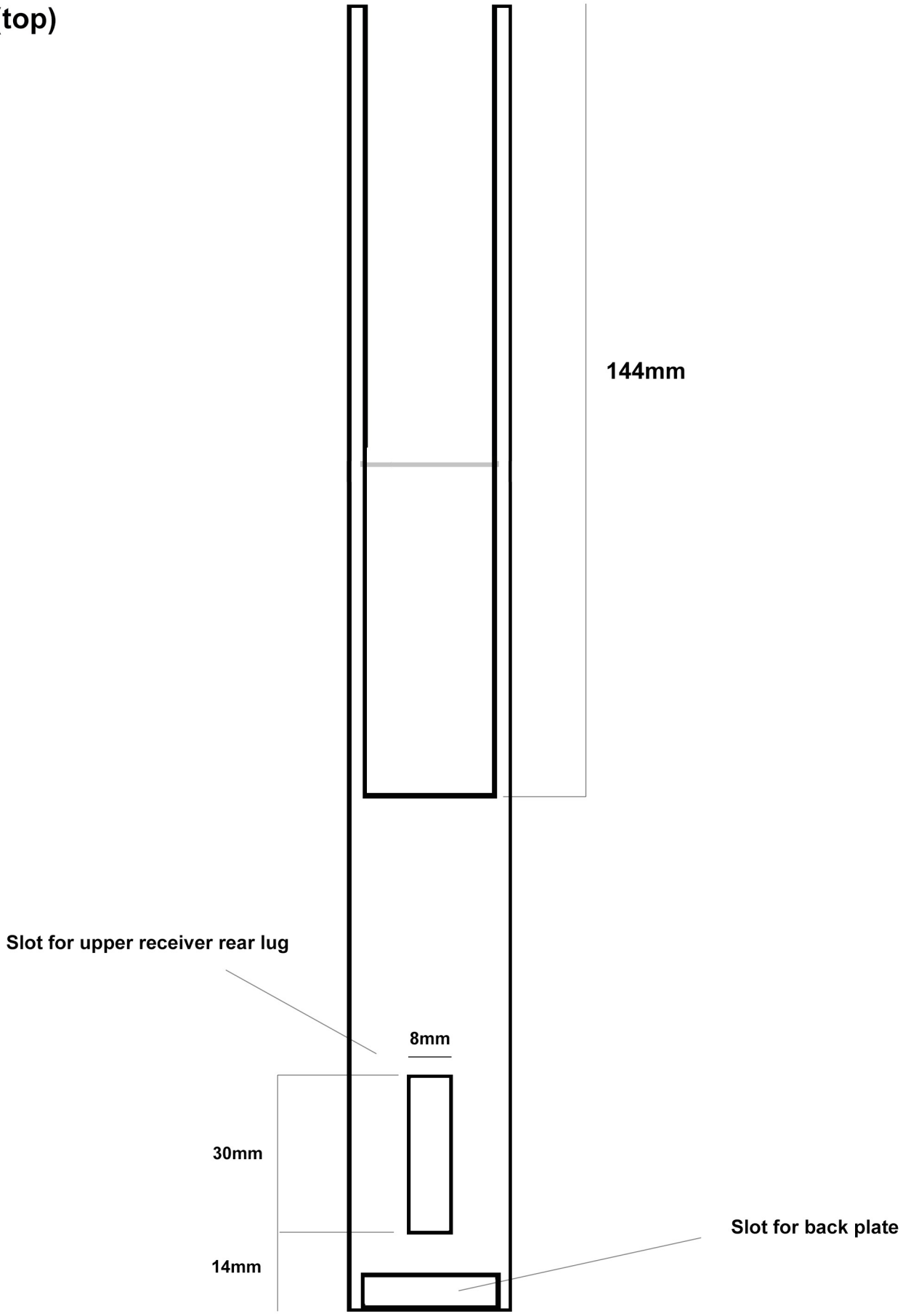
2 inches

Print on 8.5x11 US letter paper

Lower receiver (Bottom)

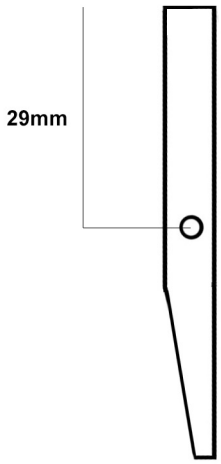


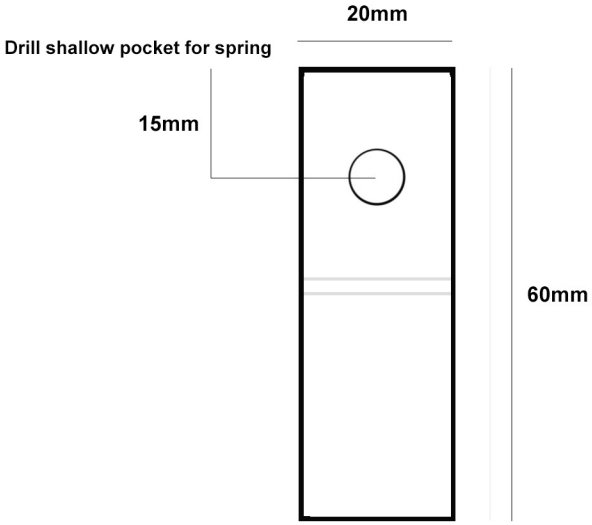
Lower receiver (top)



Magazine catch

1/4” thick steel or aluminum plate

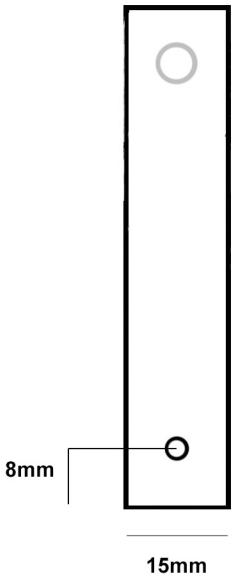




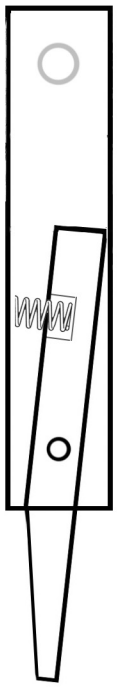
Catch housing

1” square tubing, 65mm long

Secure catch inside housing using a 1” long 3mm dia pin



Asembled



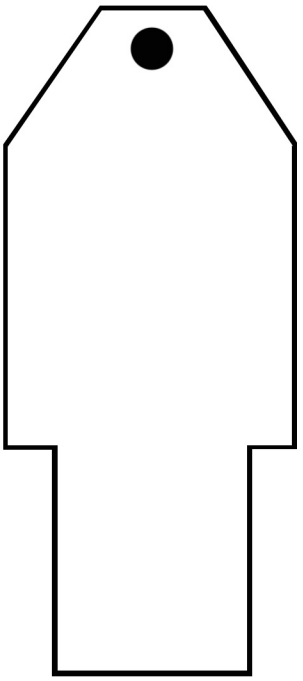
2 inches

Print on 8.5x11 US letter paper

Rear sight / lower receiver backplate

6mm (1/4") mild steel plate

Sight hole: 6mm

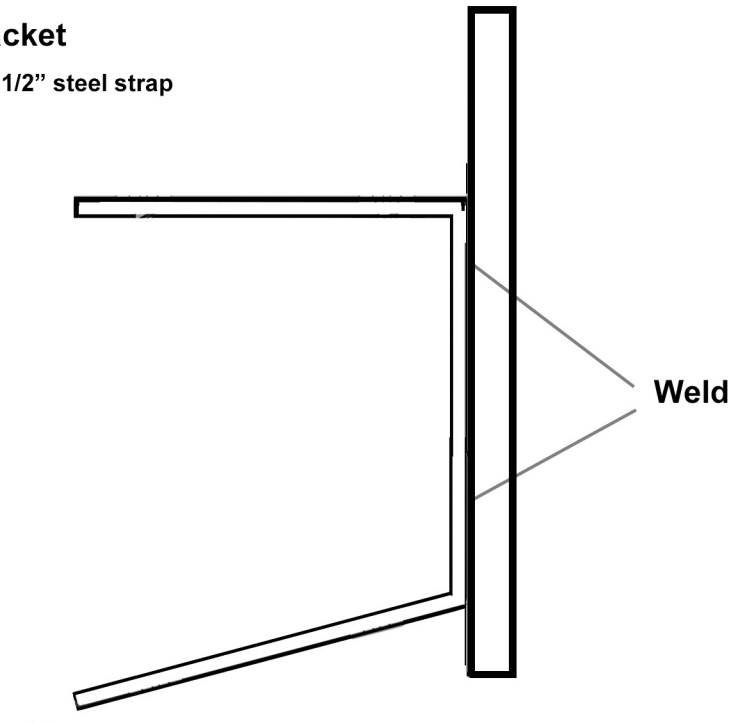


88mm

25mm

Stock bracket

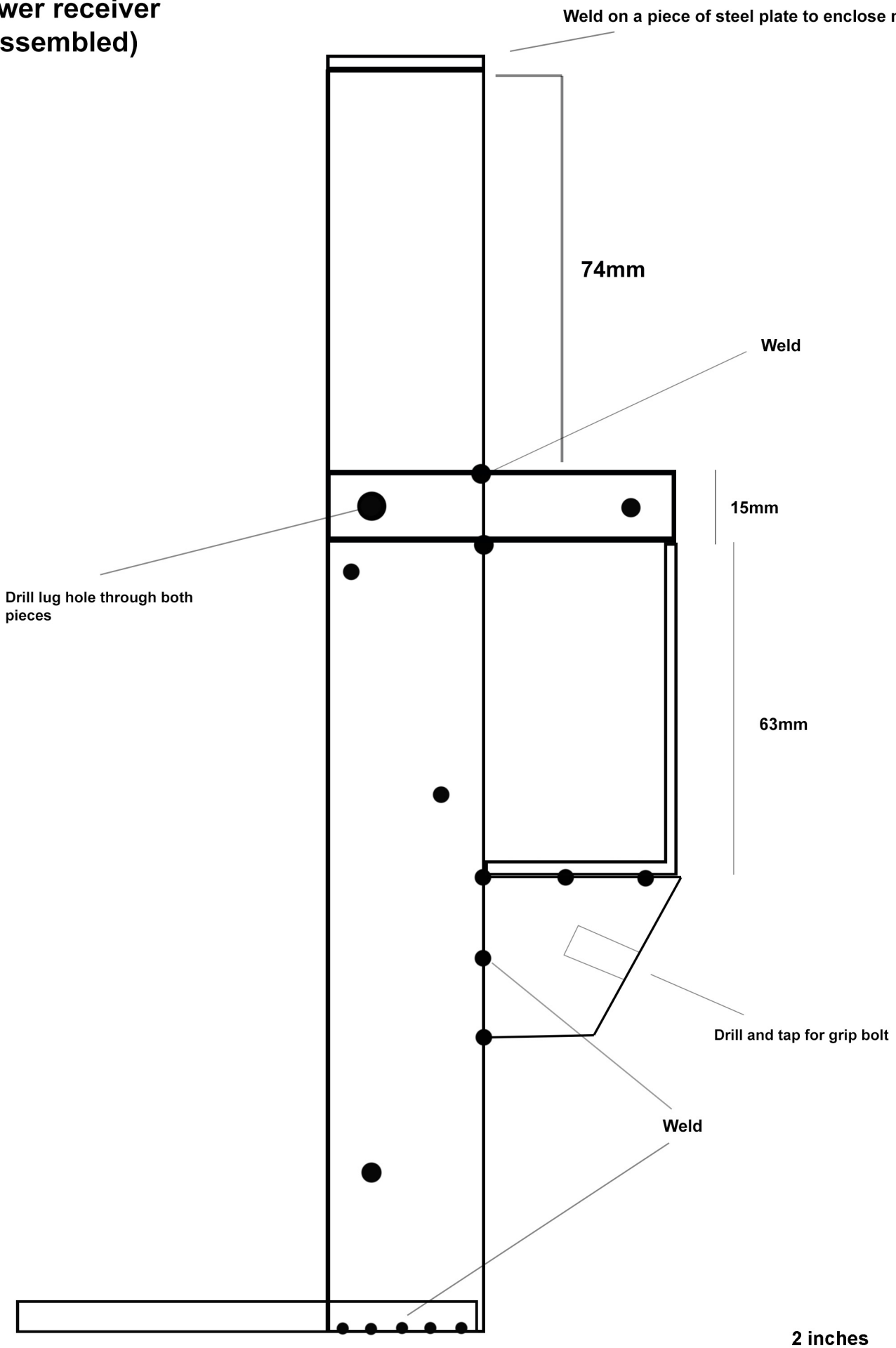
Bend from 3mm thick 1/2" steel strap



2 inches

Print on 8.5x11 US letter paper

Lower receiver (Assembled)



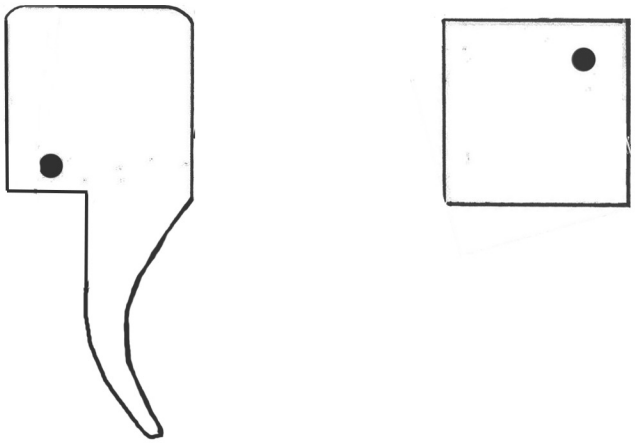
2 inches

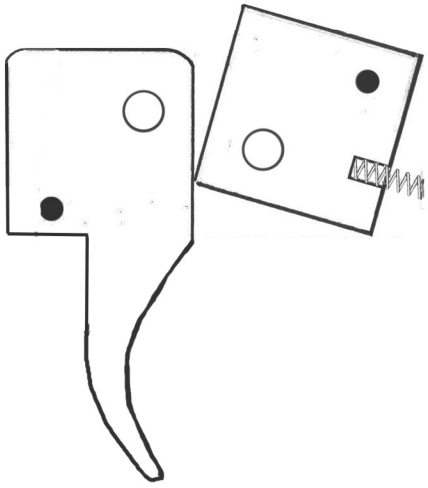
Print on 8.5x11 US letter paper

Trigger & sear

10mm thick steel plate

Templates:





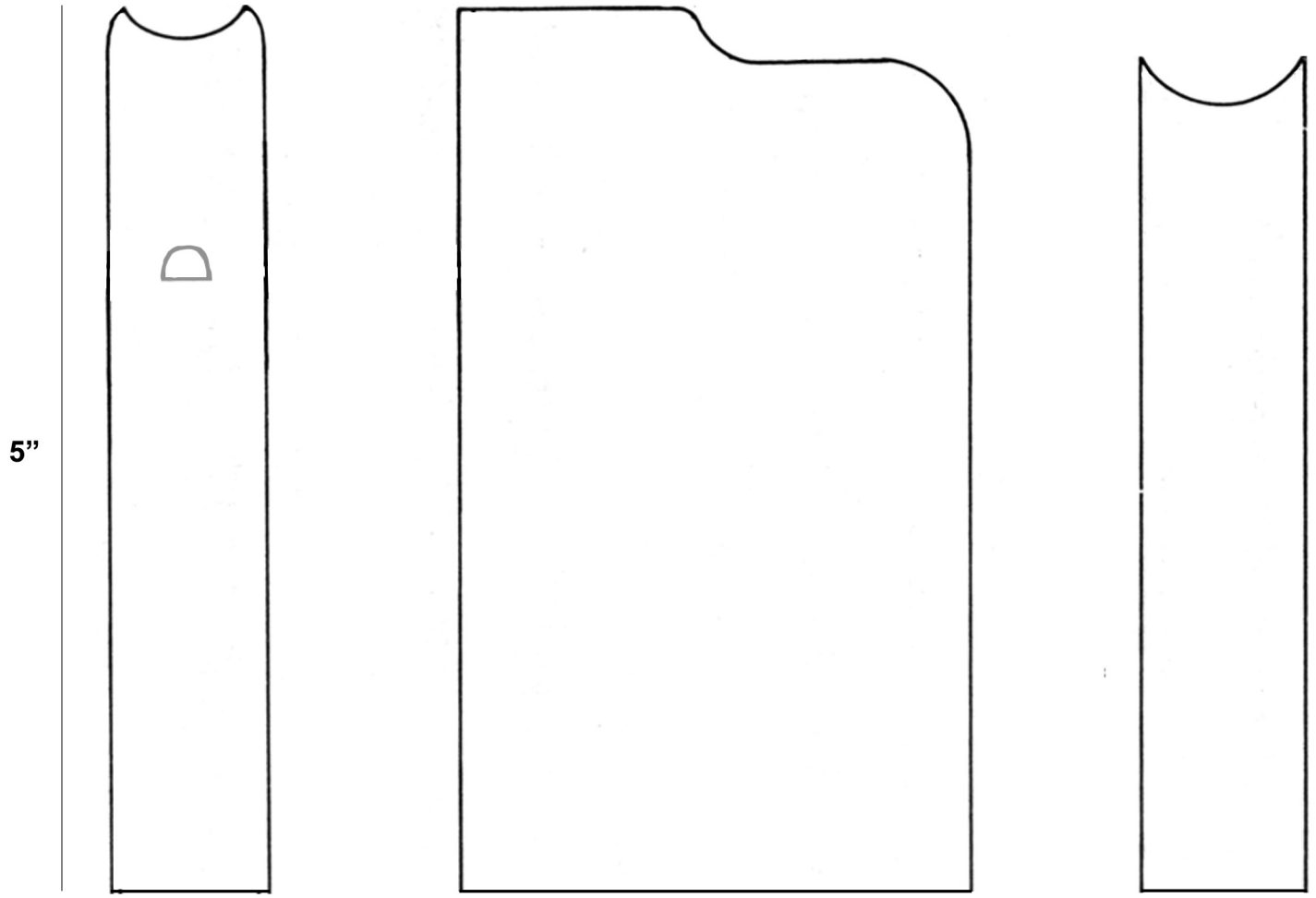
Drill and insert a 1” long 6mm dia steel bar through both trigger & sear to center each component in the lower receiver.
Drill a pocket and insert a small compression spring in position shown on sear

2 inches

Print on 8.5x11 US letter paper

Magazine body

Weld or braze together from 4 pieces of 20 gauge (1mm thick) mild steel sheet.



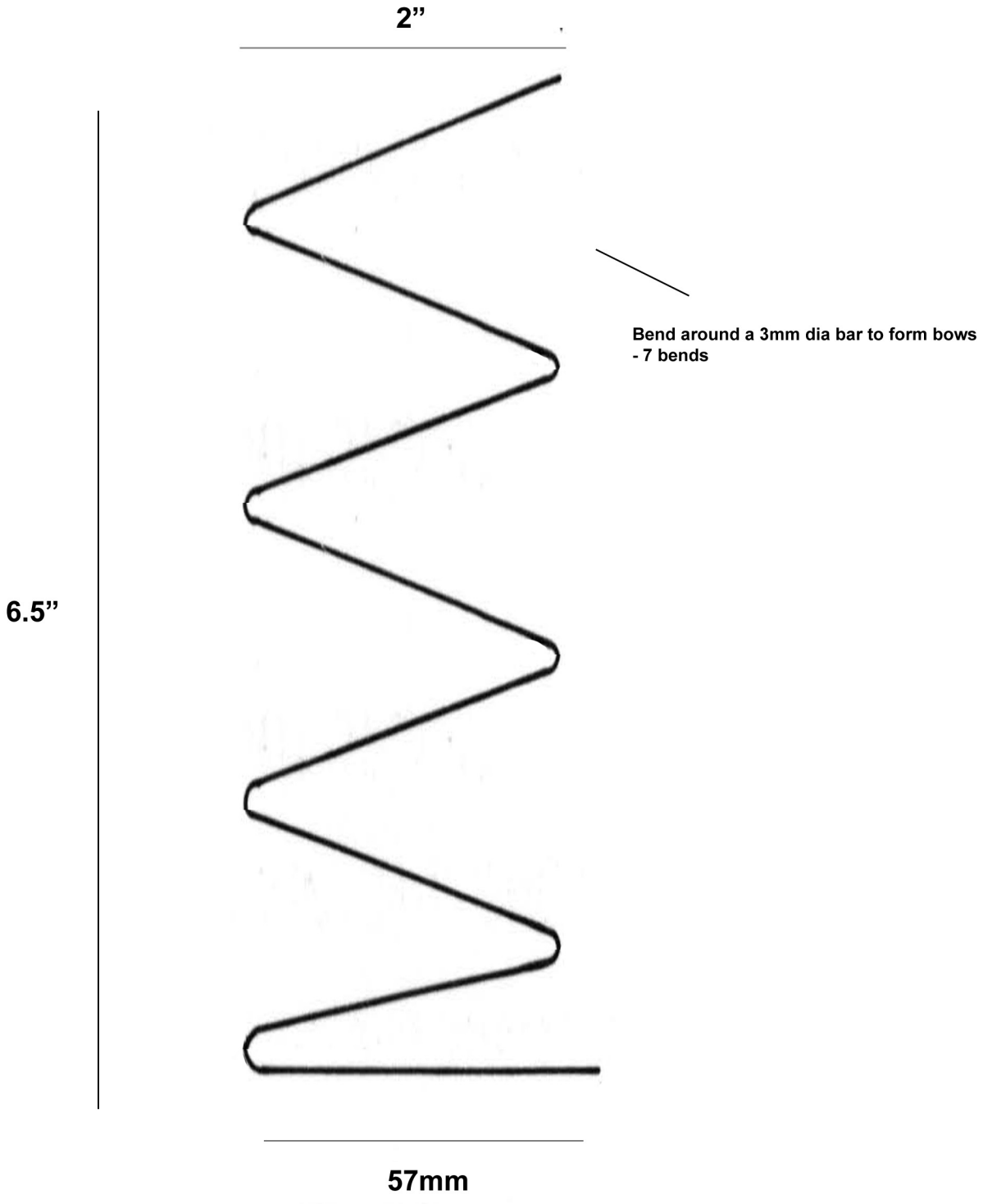
Can also be made by modifying a length of 1” x 2.5” or 1” x 3” rectangular steel or aluminum box section tubing with a wall thickness of 1.5mm. Alternatively FAL, SLR, BAR or G3 magazines may be modified to accept and feed 12 gauge shells.

2 inches

Print on 8.5x11 US letter paper

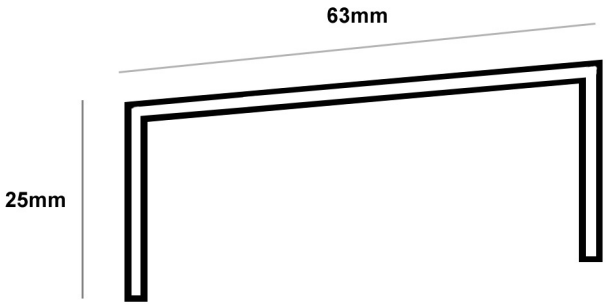
Magazine spring

Form from .025 flat spring steel strip, 3/4” wide

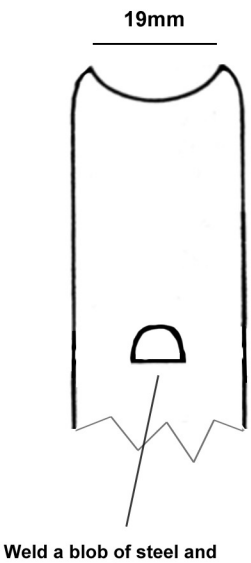


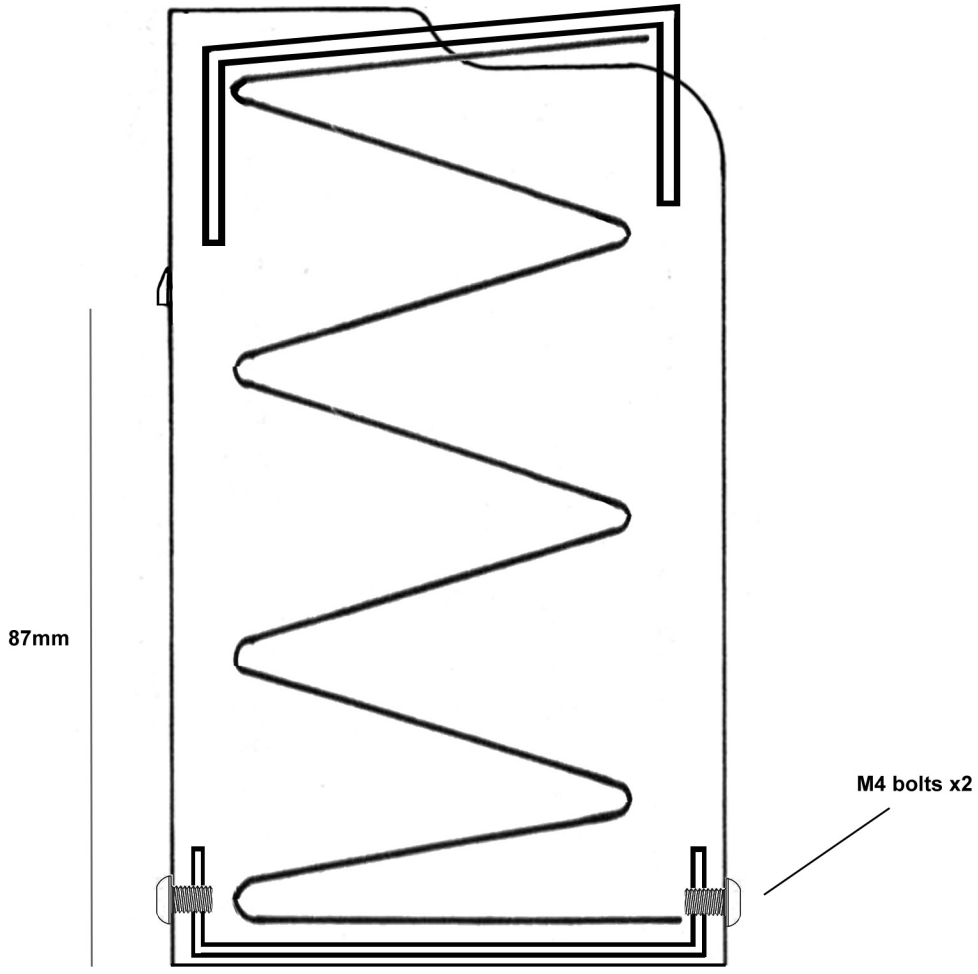
Magazine follower & assembly

Bend from 3mm thick, 20mm wide steel strip



Bend lips inwards

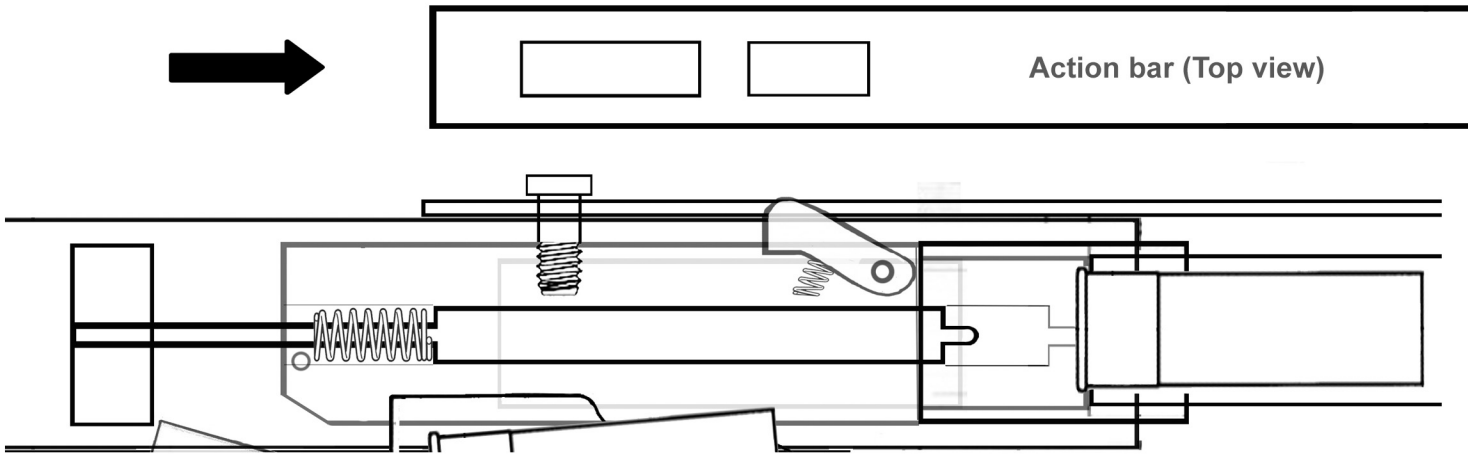




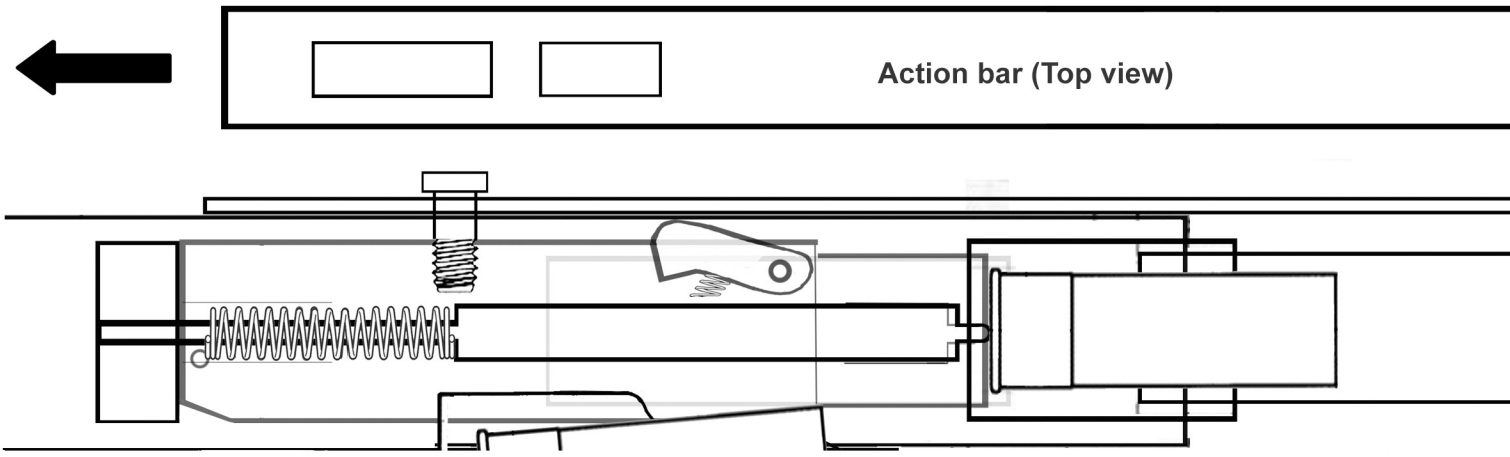
Bolt locking / unlocking sequence

When the pump forearm is fully forward the spring loaded locking lug on the bolt is free to engage with the lug slot in the top of the receiver, securely locking the bolt in place. When the pump forearm is pulled rearward the locking lug is pushed out of engagement with the locking lug hole by the action bar, enabling the bolt to travel rearward when the bolt peg makes contact with the front of the first slot in the action bar.

Bolt locked:

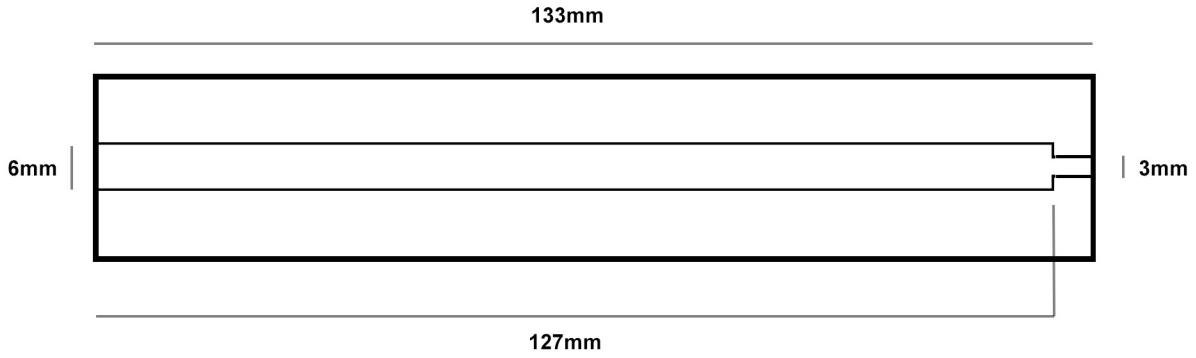


Bolt unlocked:

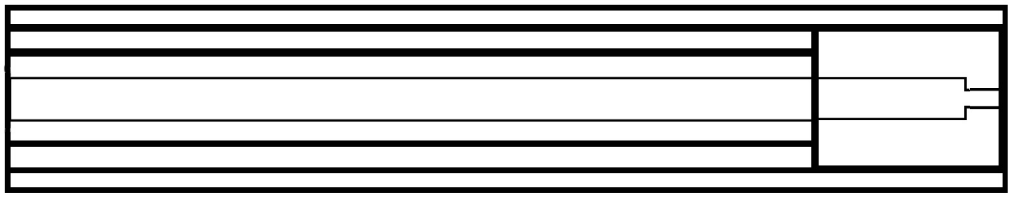


Inner bolt piece

Firing pin channel is bored through a 133mm long length of 1” (25mm) mild steel bar.



An alternative bolt construction method consisting of multiple lengths of steel tube and bar stock welded together



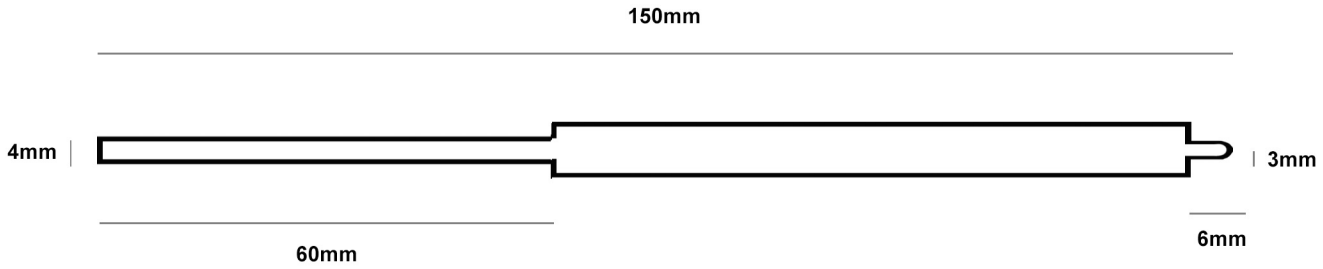
1” + 5/8” + 1/2” steel tube + 3/4” steel bar stock welded in front

2 inches

Print on 8.5x11 US letter paper

Firing pin

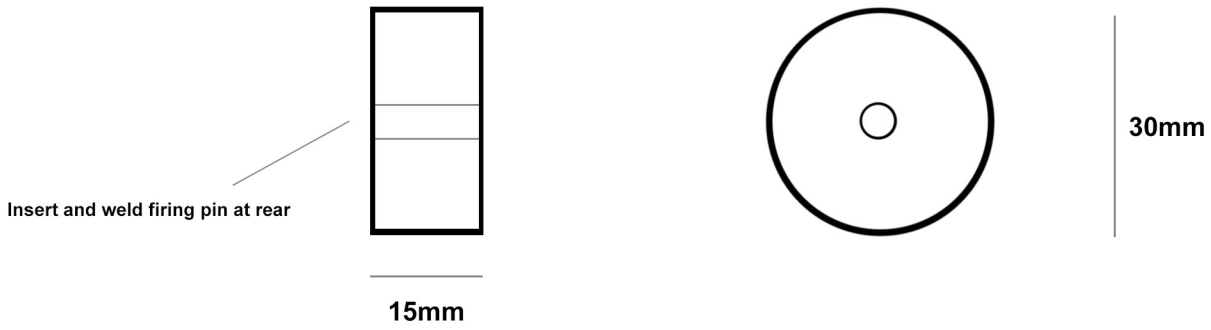
Turn to shape from 6mm dia steel bar stock



Can alternatively be constructed by sleeving a length of 4mm dia steel bar with an 84mm length of 6mm steel tubing.

Striker

30mm steel round or square bar

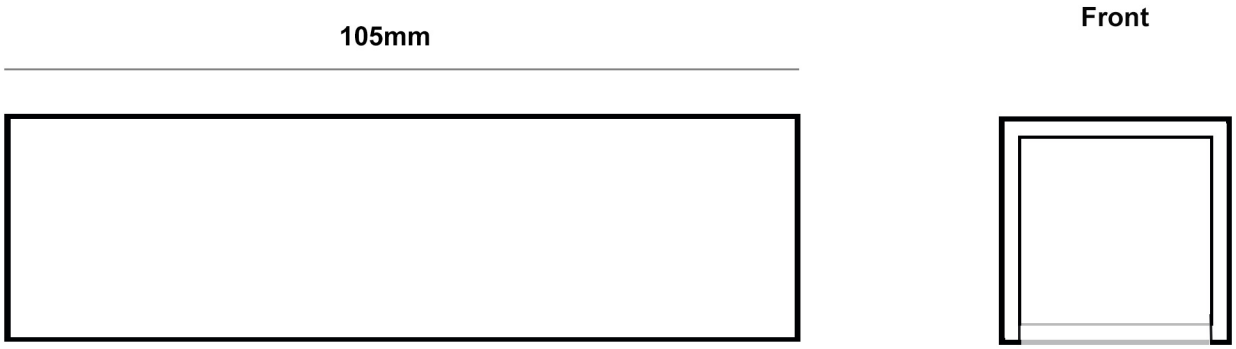


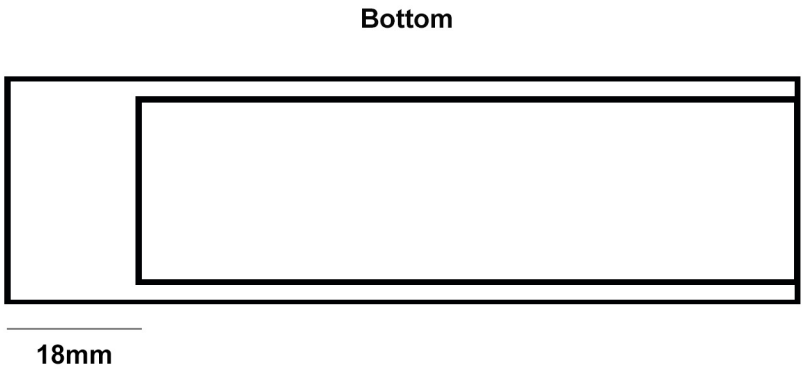
2 inches

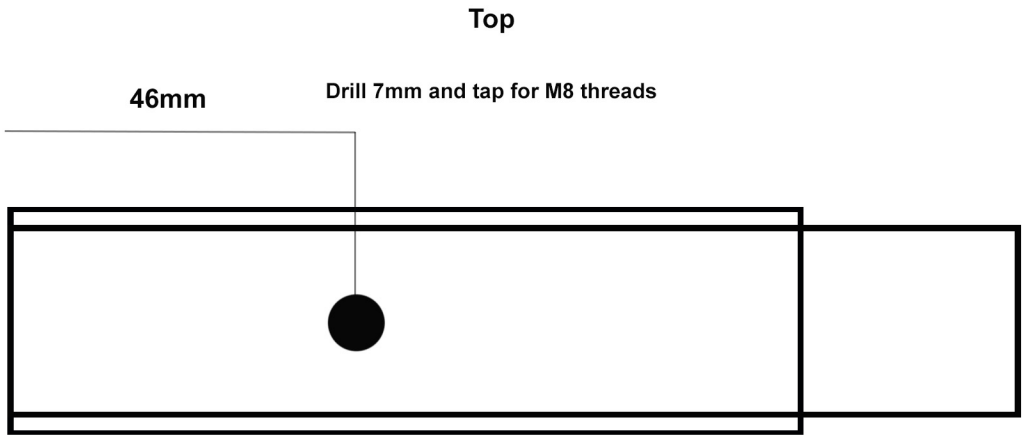
Print on 8.5x11 US letter paper

Bolt body

30mm x 30mm x 2mm wall steel square box or round tube (1” ID)







2 inches

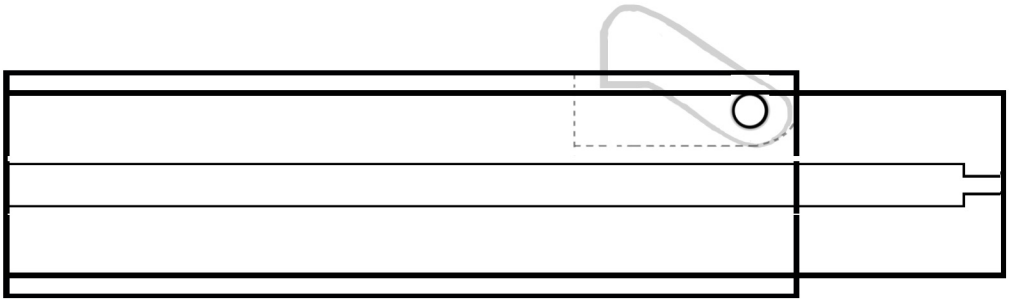
Print on 8.5x11 US letter paper

Bolt locking lug

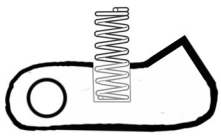
Cut to shape from 10mm thick steel plate or flat bar. Drill hole for 5mm dia, 30mm long pivot pin.

Template

Drill a 5mm dia hole 6mm in from top and front of bolt body for lug pin. Grind out a pocket in bolt until the lug is able to pivot flush with top of bolt body.



Drill a 6mm dia pocket hole in lug to accommodate a strong compression spring.



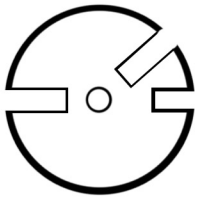
2 inches

Print on 8.5x11 US letter paper

Extractors

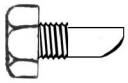
Cut from 2mm thick steel sheet. Harden.

Templates

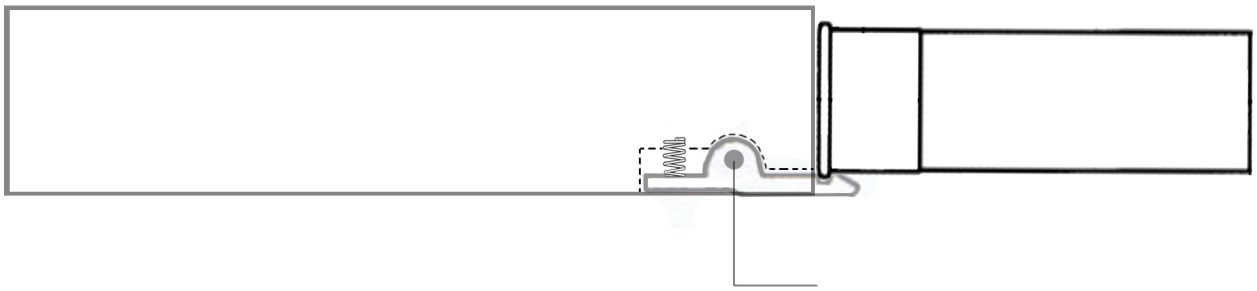


Ejector

Modify from an M6 bolt, 10mm long



Cut ejector slot in bolt using an angle grinder fitted with a slitting disc.
Slot should be 4mm wide, 7mm deep, 3” long



Drill 10mm from front / 4mm from sides

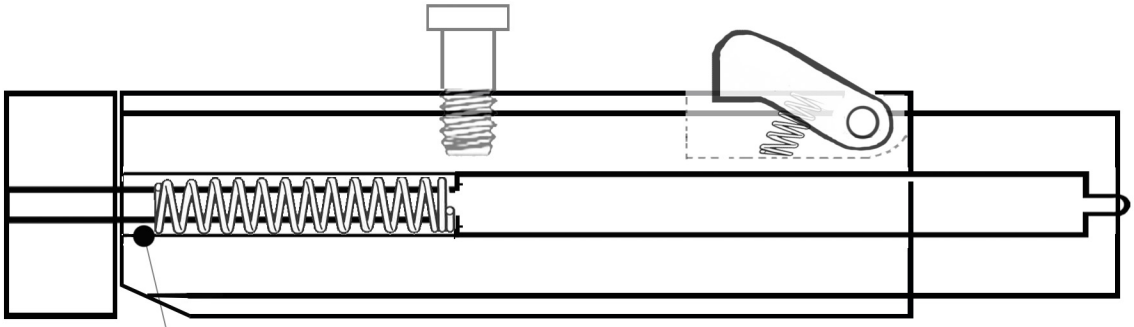
+ X2 4mm dia compression springs

2 inches

Print on 8.5x11 US letter paper

Bolt assembled

Side:

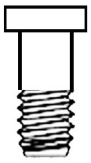


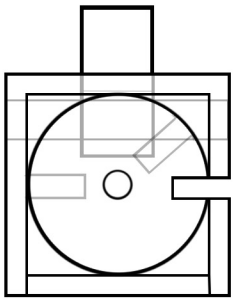
Drill a 4mm hole and insert a seloc pin to retain firing pin assembly

Front:

Bolt peg

M8 bolt - 15mm long





Weld bolt piece into bolt body

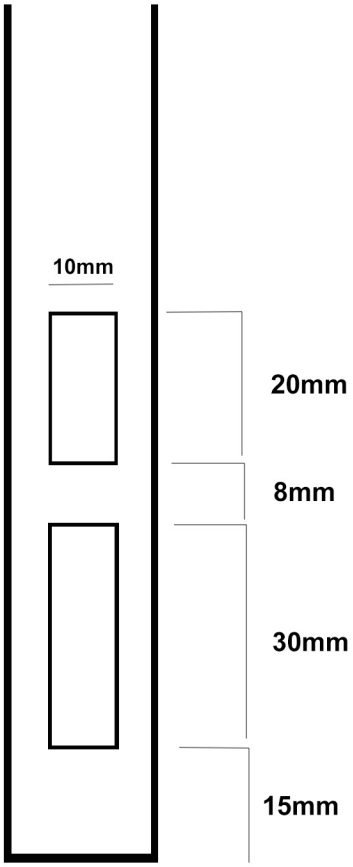
2 inches

Print on 8.5x11 US letter paper

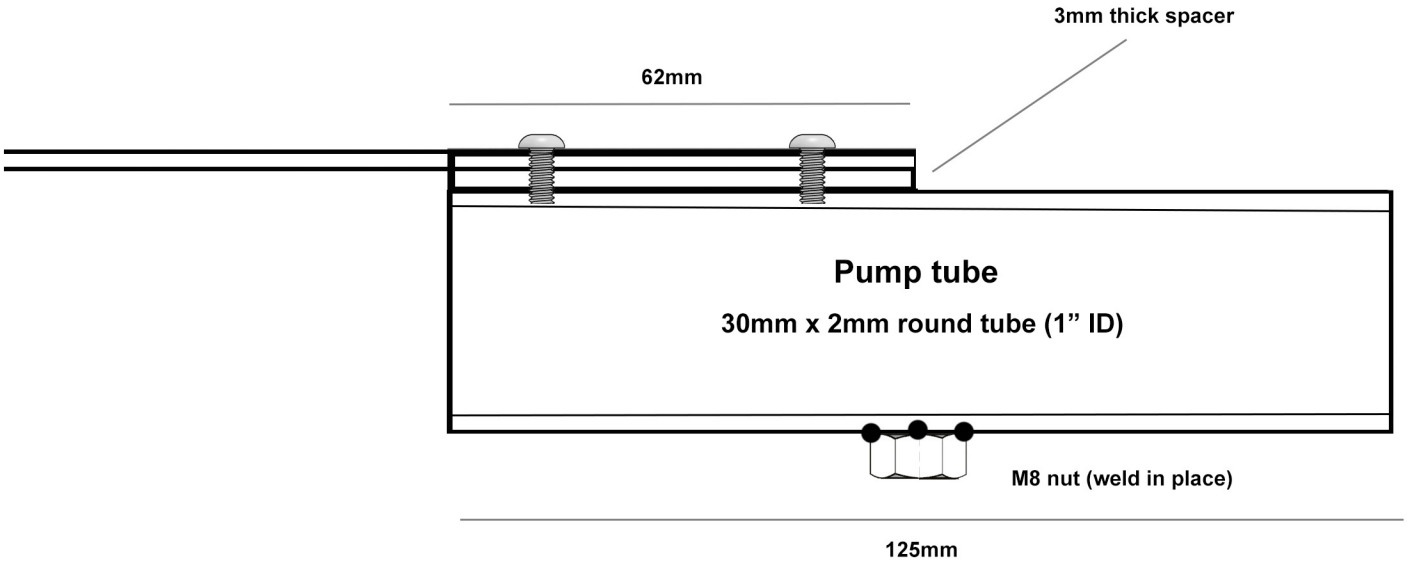
Action bar

20mm wide, 2mm thick steel strip.
290mm long.

Rear end:



Front end:

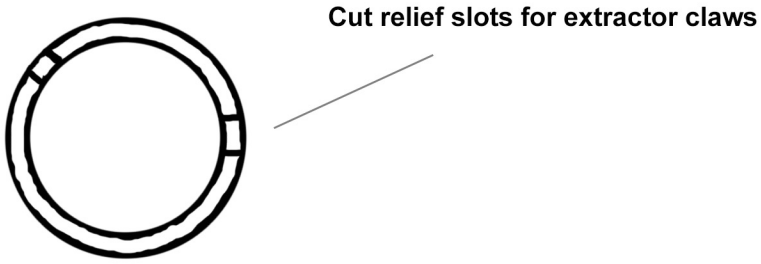


2 inches

Print on 8.5x11 US letter paper

Barrel

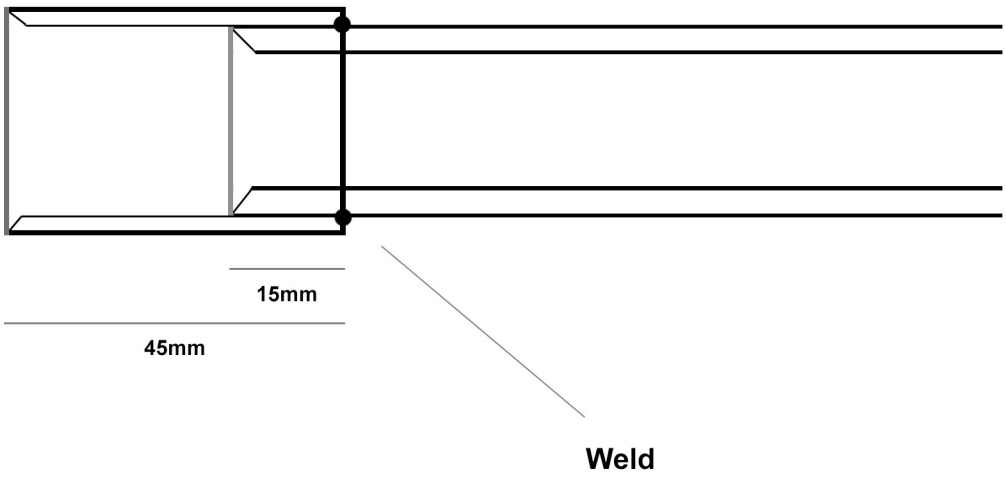
25mm x 2.5mm wall seamless steel tube (3/4” ID, 1” OD) - 20” long



Bevel both collar and barrel entrance

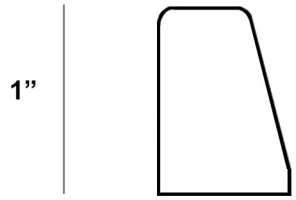
Barrel collar

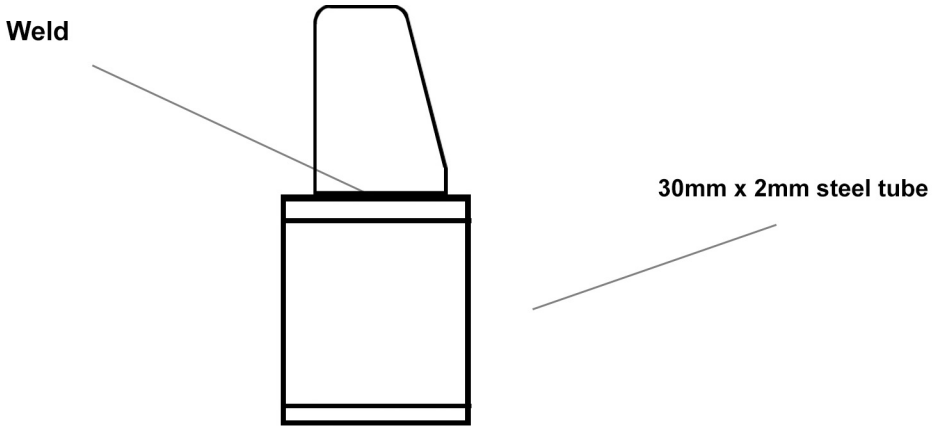
30mm x 2mm wall (1” ID)



Front sight

3mm thick mild steel sheet





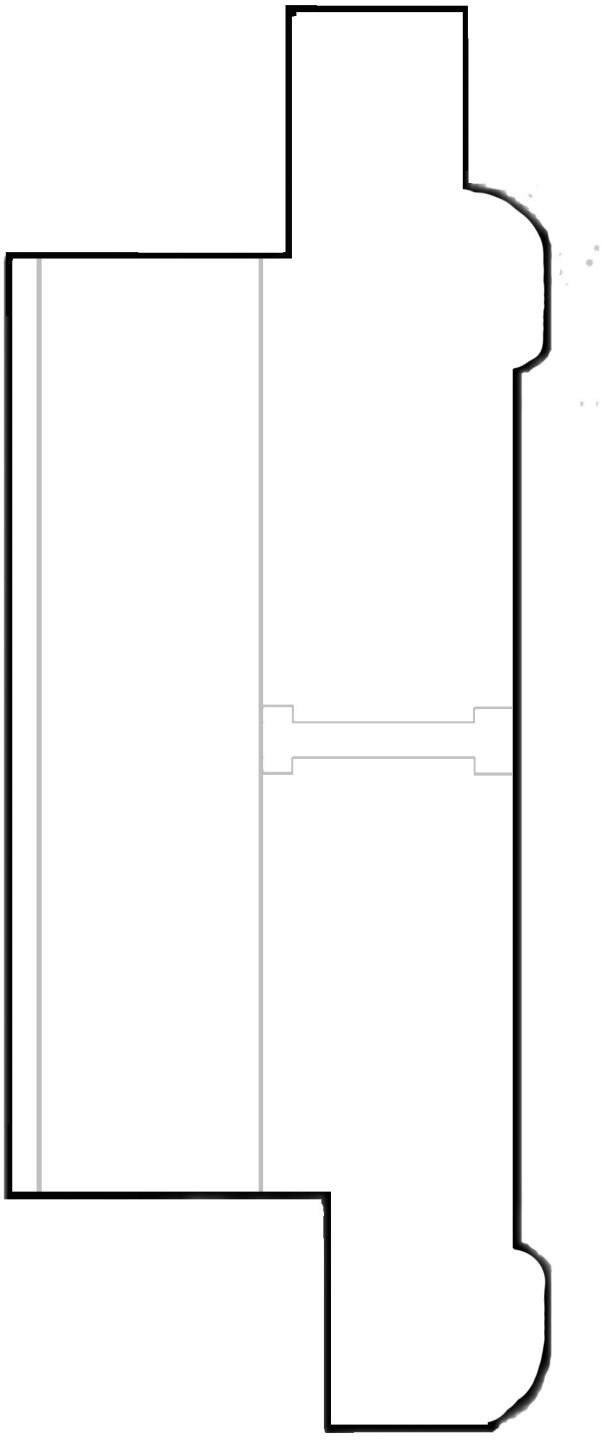
Weld front sight collar to barrel 227mm from chamber collar

2 inches

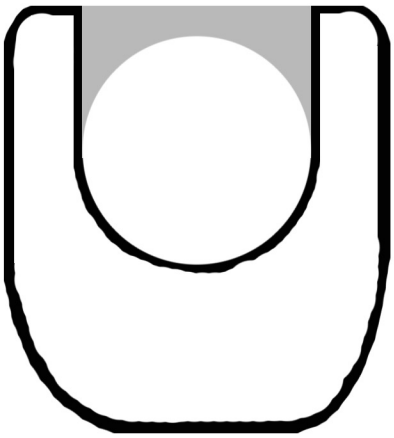
Print on 8.5x11 US letter paper

Pump forearm

2” thick hardwood or plastic



Front



Forearm is secured to pump tube via an M8 bolt

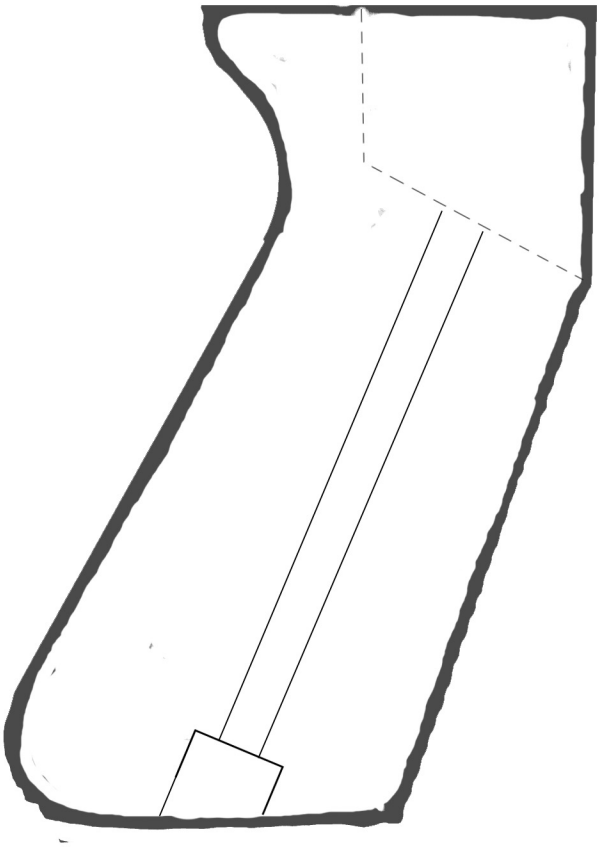
2 inches

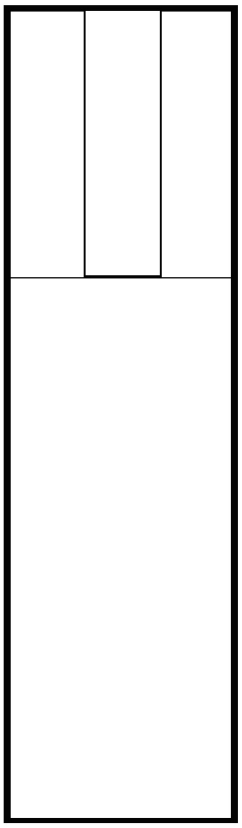
Print on 8.5x11 US letter paper

Pistol grip

Cut from 1 3/8” thick hardwood or plastic

Drill a 6mm dia hole to secure grip to mounting block on lower receiver using a 3” long m6 bolt





Alternatively weld in place a piece of steel plate and bolt on two grip panels either side to match the grip plate profile.

2 inches

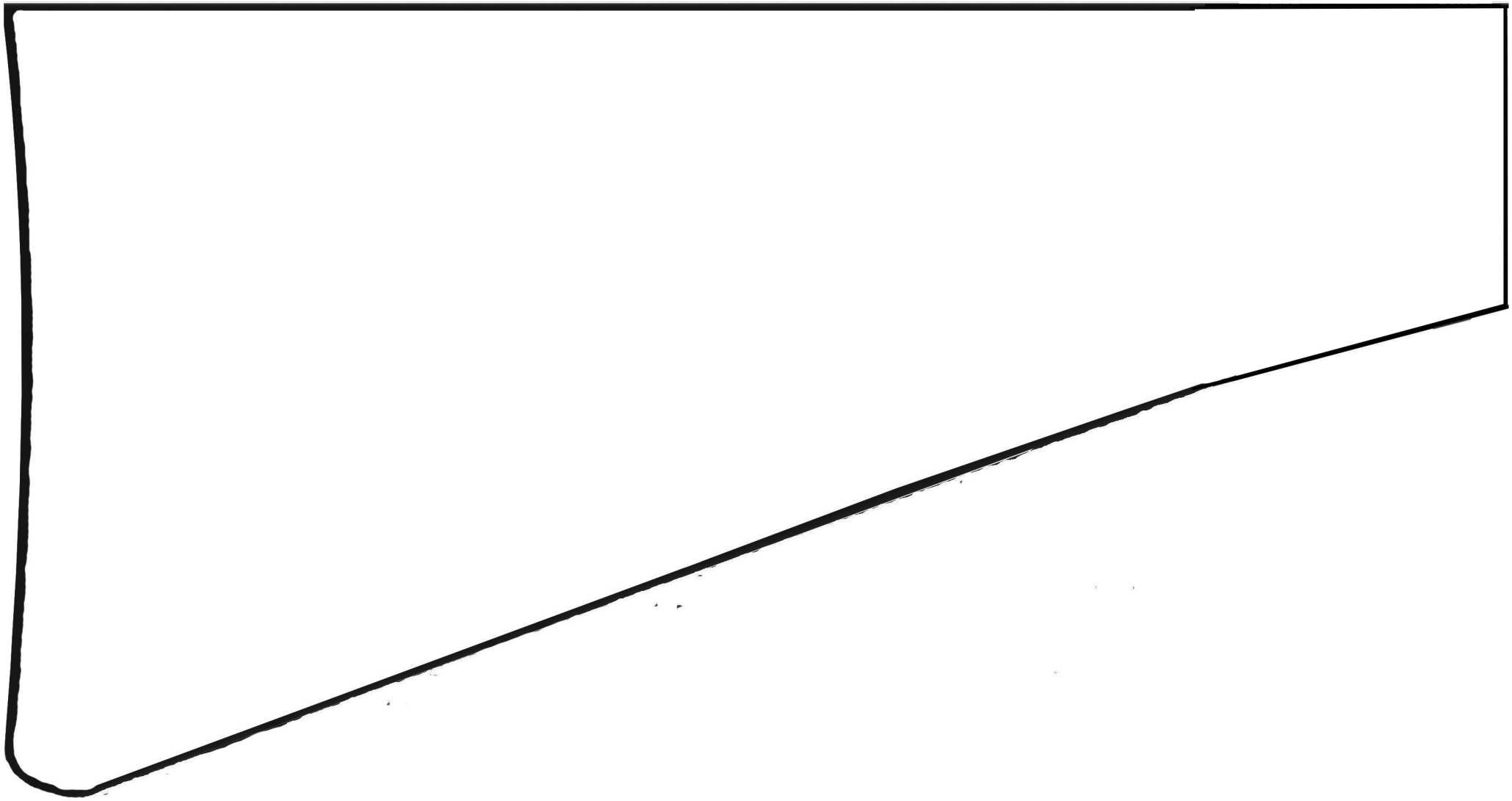
Print on 8.5x11 US letter paper

2 inches

Print on 8.5x11 US letter paper

Stock

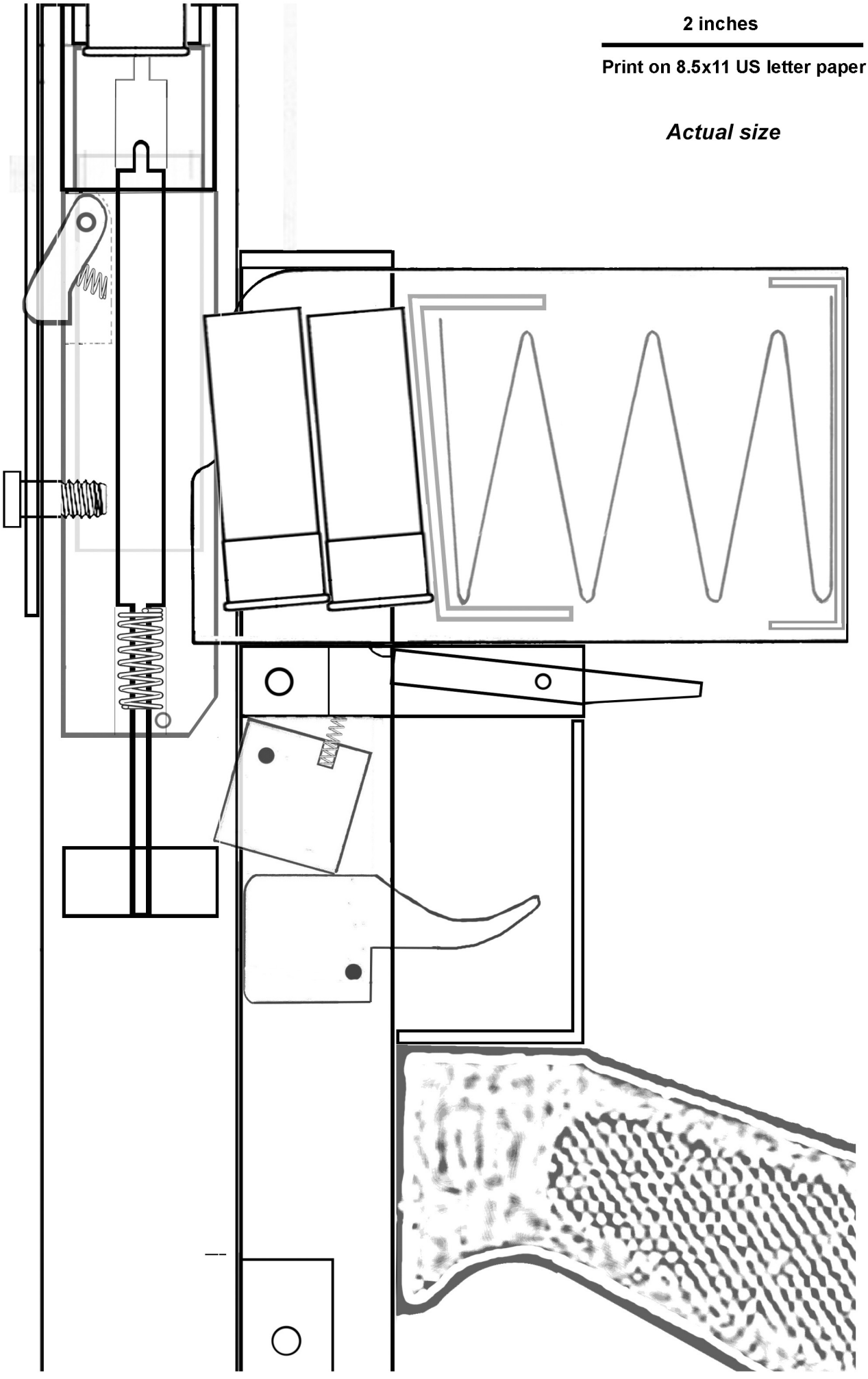
1.5” hardwood or plastic

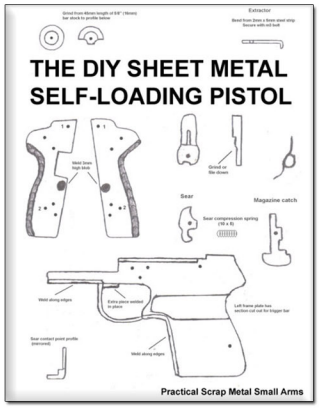


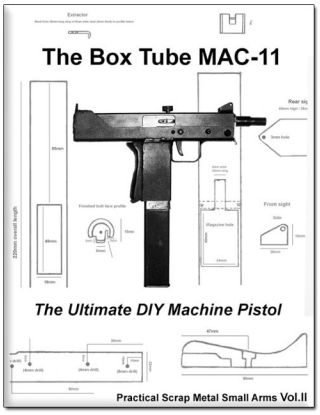
2 inches

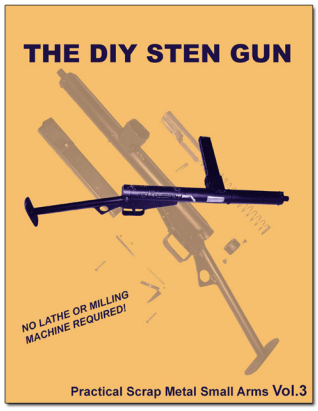
Print on 8.5x11 US letter paper

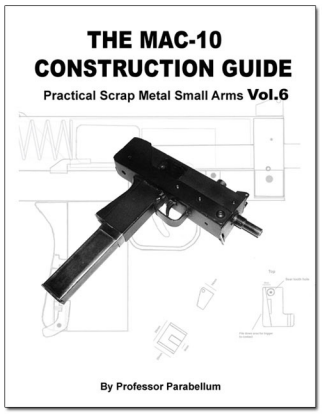
Actual size

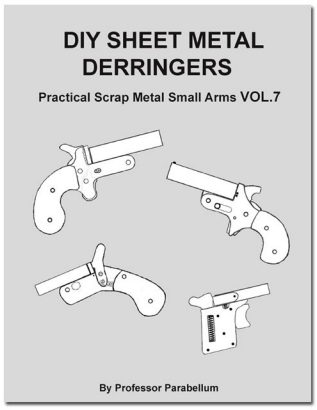


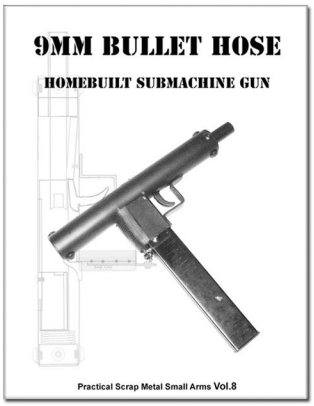

THE DIY SHEET METAL
SELF-LOADING PISTOL
Practical Scrap Metal Small Arms

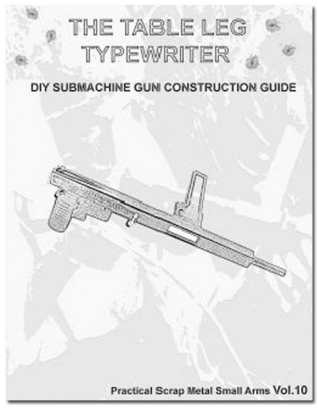

The Box Tube MAC-11
The Ultimate DIY Machine Pistol
Practical Scrap Metal Small Arms Vol.II

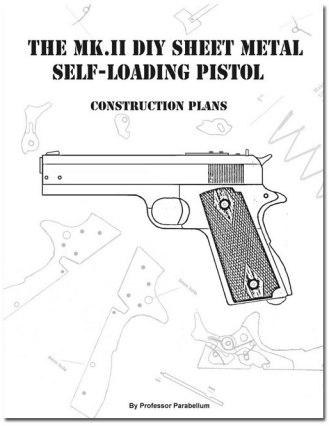

THE DIY STEN GUN
NO LATHE OR MILLING MACHINE REQUIRED!
Practical Scrap Metal Small Arms Vol.3

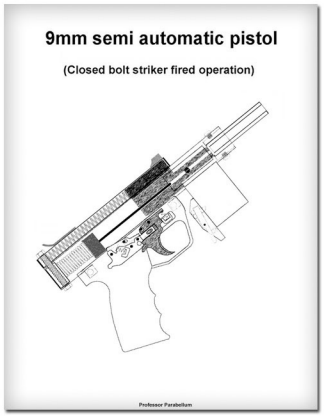

THE MAC-10
CONSTRUCTION GUIDE
Practical Scrap Metal Small Arms Vol.6
By Professor Parabellum

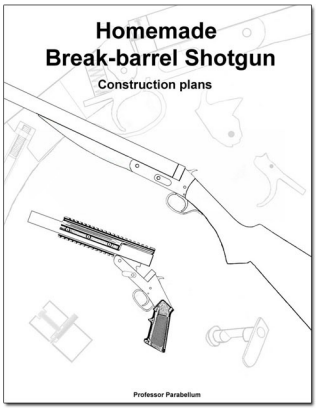

DIY SHEET METAL
DERRINGERS
Practical Scrap Metal Small Arms VOL.7
By Professor Parabellum

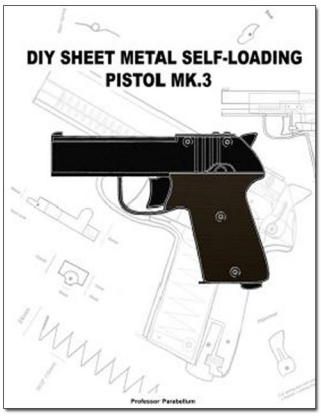

9MM BULLET HOSE
HOMEBUILT SUBMACHINE GUN
Practical Scrap Metal Small Arms Vol.8

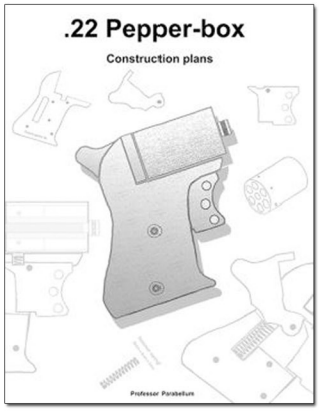

THE TABLE LEG
TYPEWRITER
DIY SUBMACHINE GUN CONSTRUCTION GUIDE
Practical Scrap Metal Small Arms Vol.10

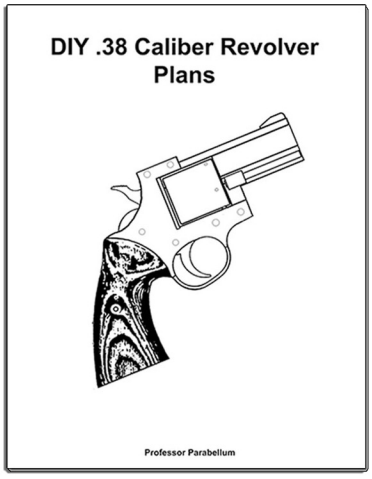

THE MK.II DIY SHEET METAL
SELF-LOADING PISTOL
CONSTRUCTION PLANS
By Professor Parabellum

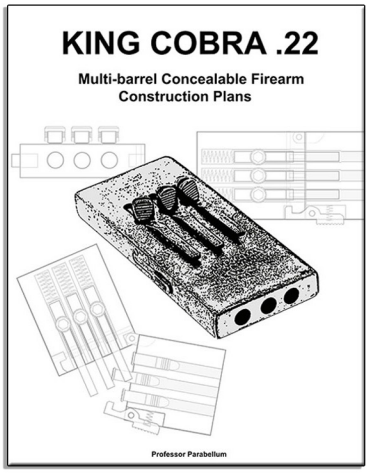

9mm semi automatic pistol
(Closed bolt striker fired operation)
Professor Parabellum

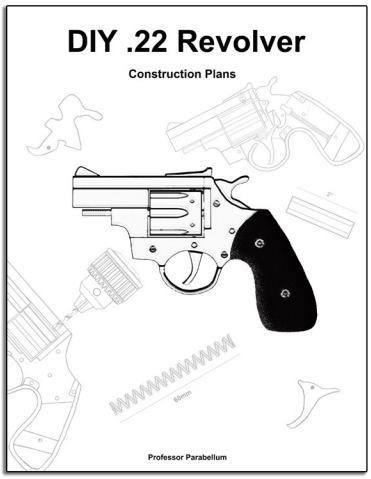

Homemade
Break-barrel Shotgun
Construction plans
Professor Parabellum


DIY SHEET METAL SELF-LOADING
PISTOL MK.3
Professor Parabellum


.22 Pepper-box
Construction plans
Professor Parabellum


DIY .38 Caliber Revolver
Plans
Professor Parabellum


KING COBRA .22
Multi-barrel Concealable Firearm
Construction Plans
Professor Parabellum


DIY .22 Revolver
Construction Plans
Professor Parabellum